

FIG. 1

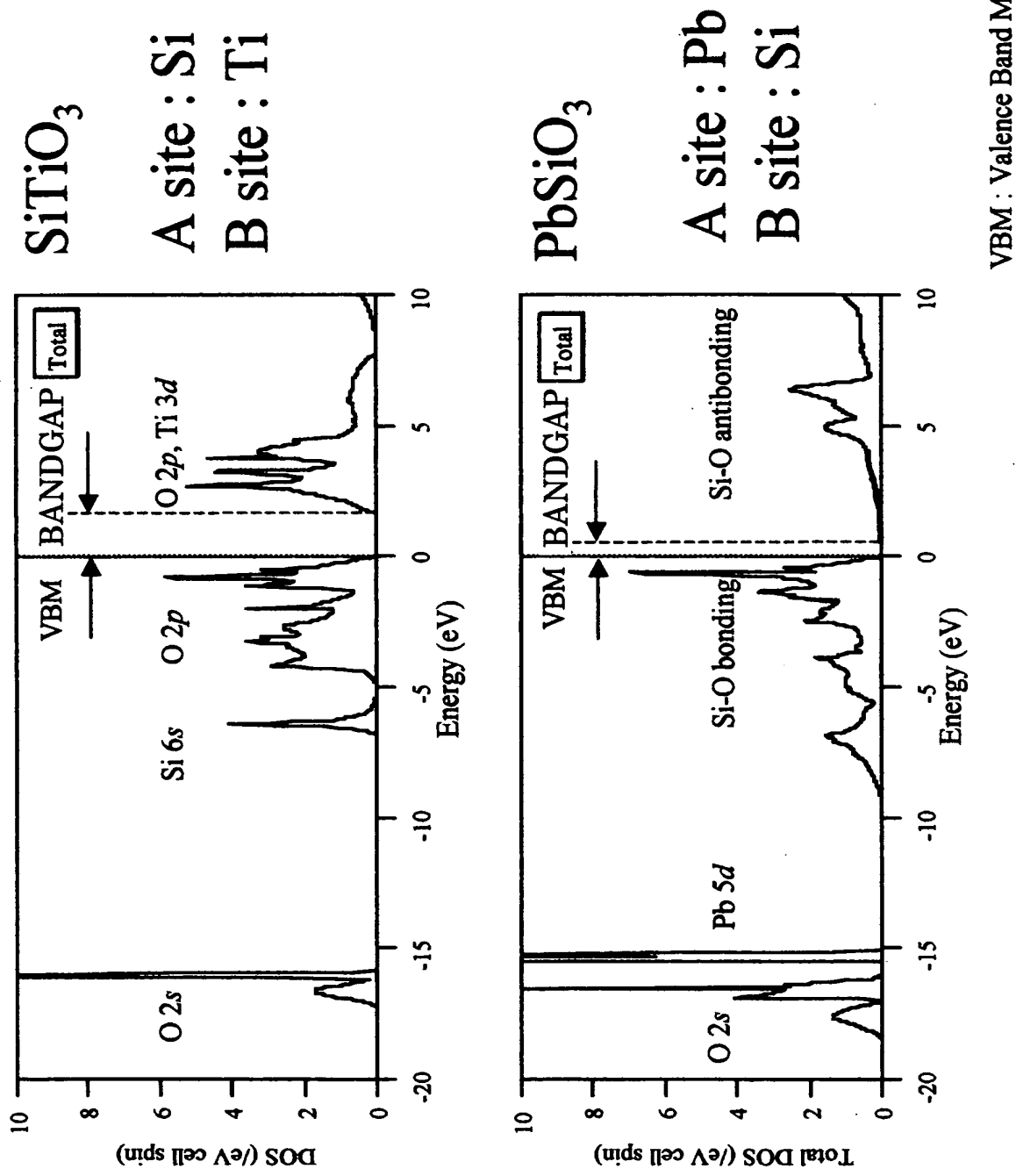


FIG. 2

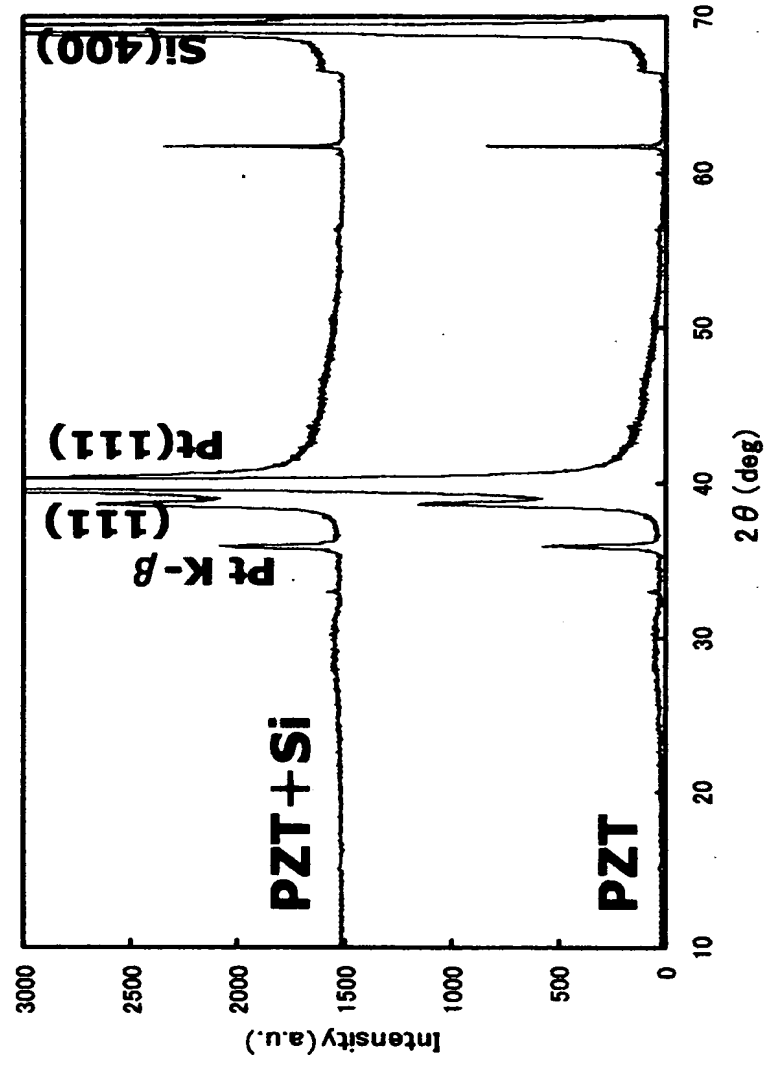
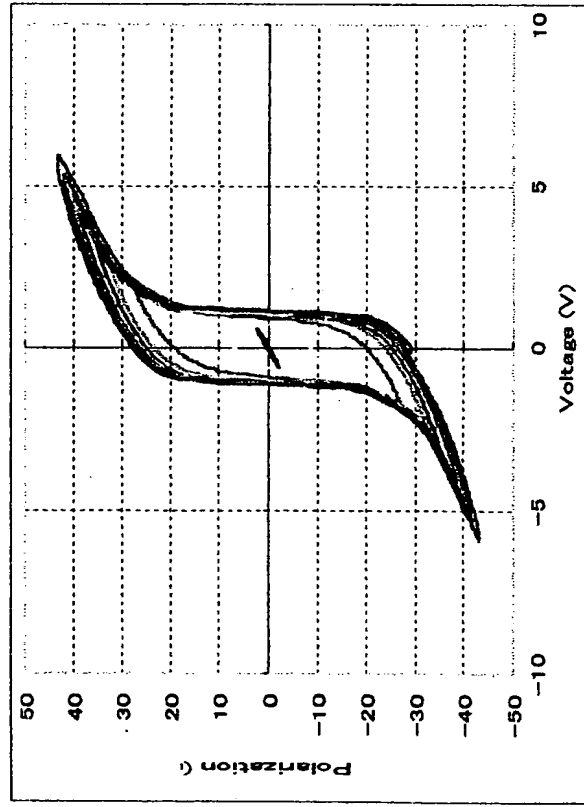


FIG. 3

PZT



PZT+Si

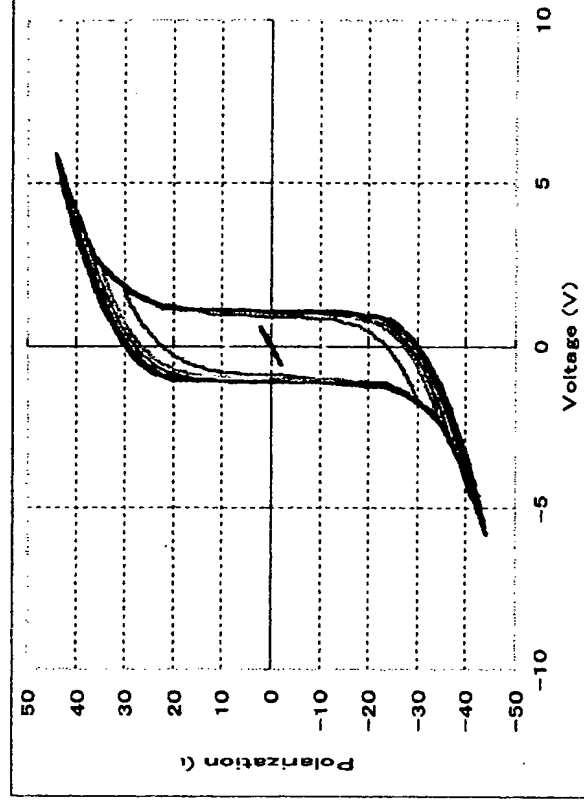


FIG. 4A

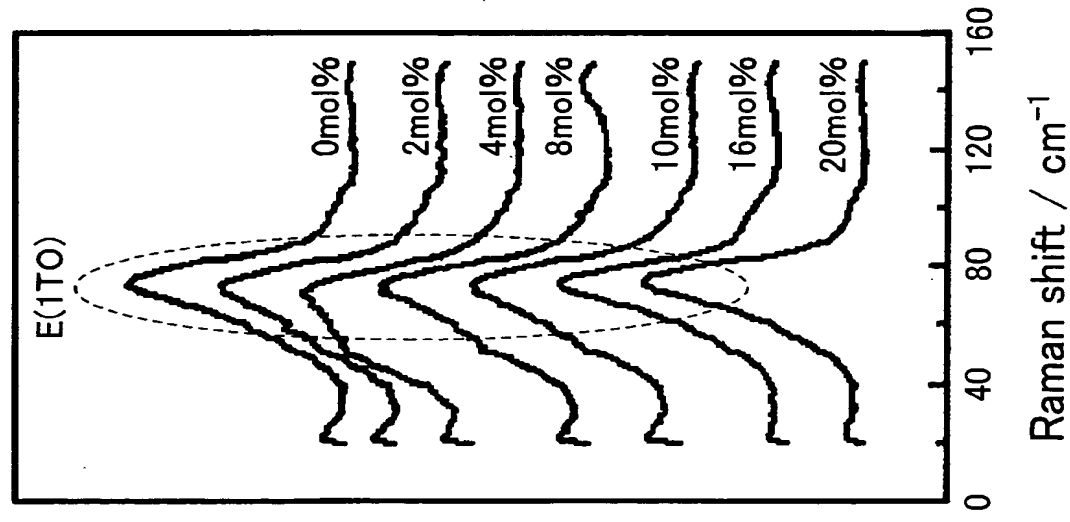


FIG. 4B

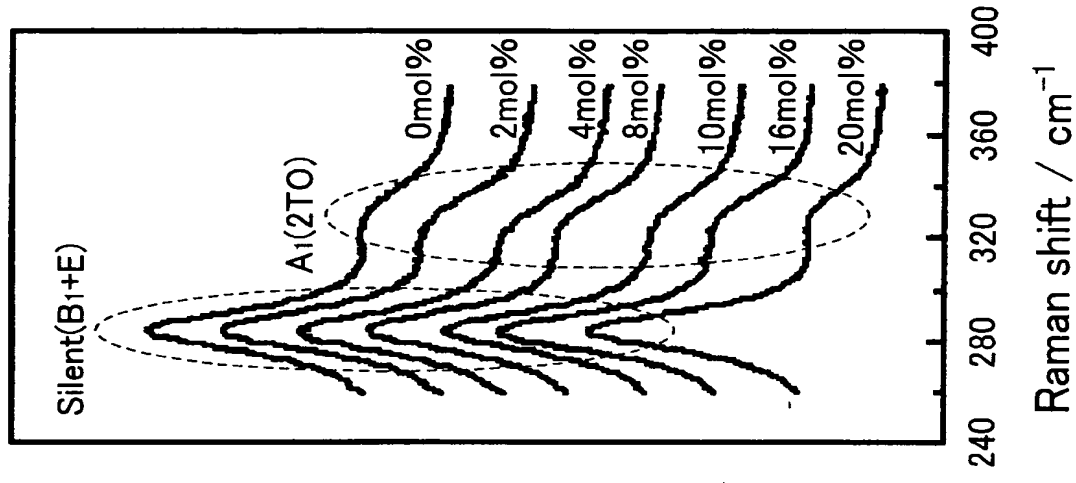


FIG. 5

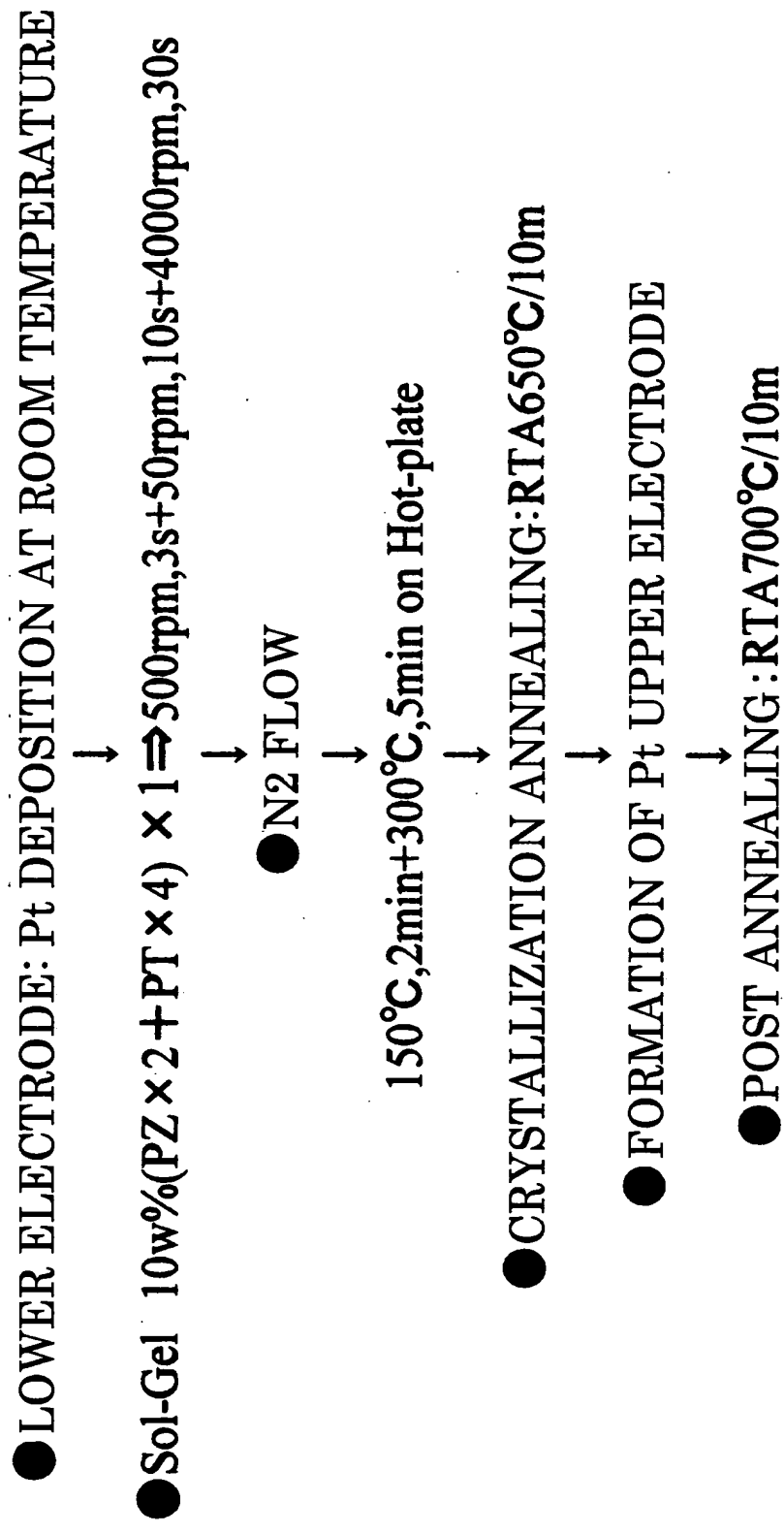
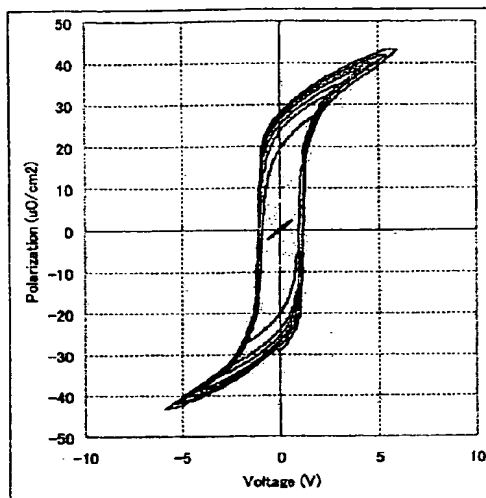
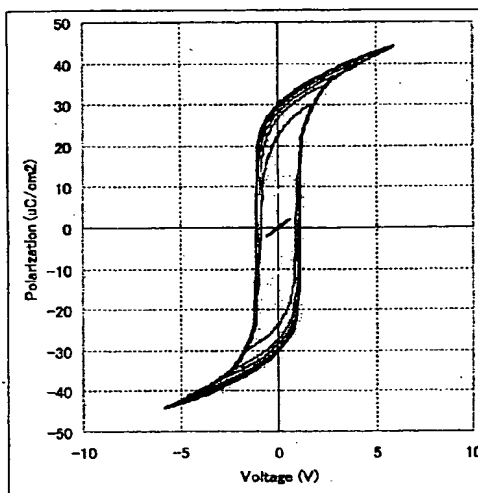


FIG. 6

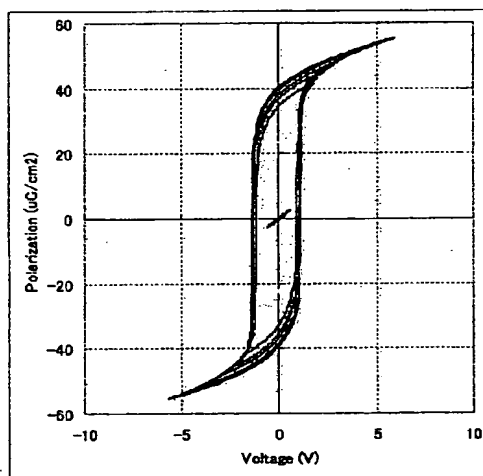
Nb=0 [mol%]



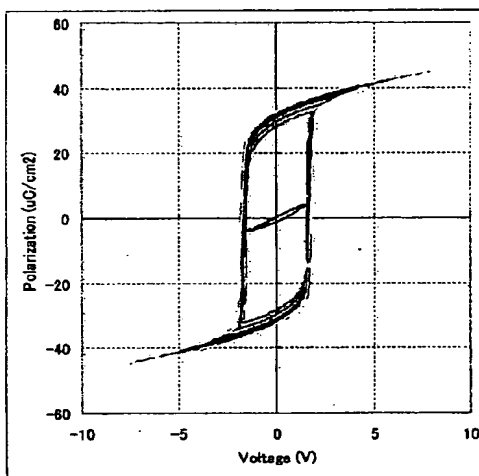
5



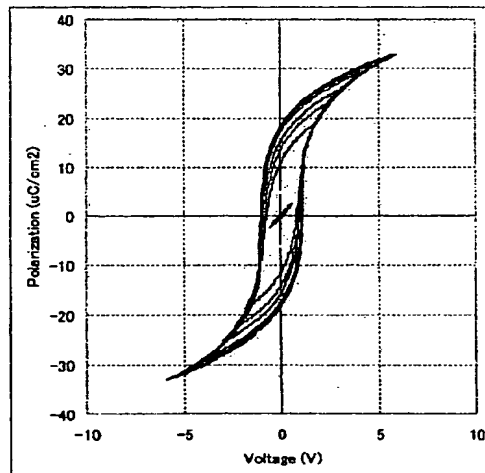
Nb=10 [mol%]



20



Nb=30 [mol%]



40

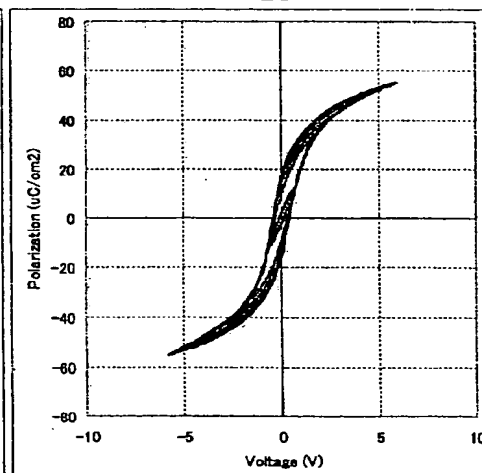


FIG. 7

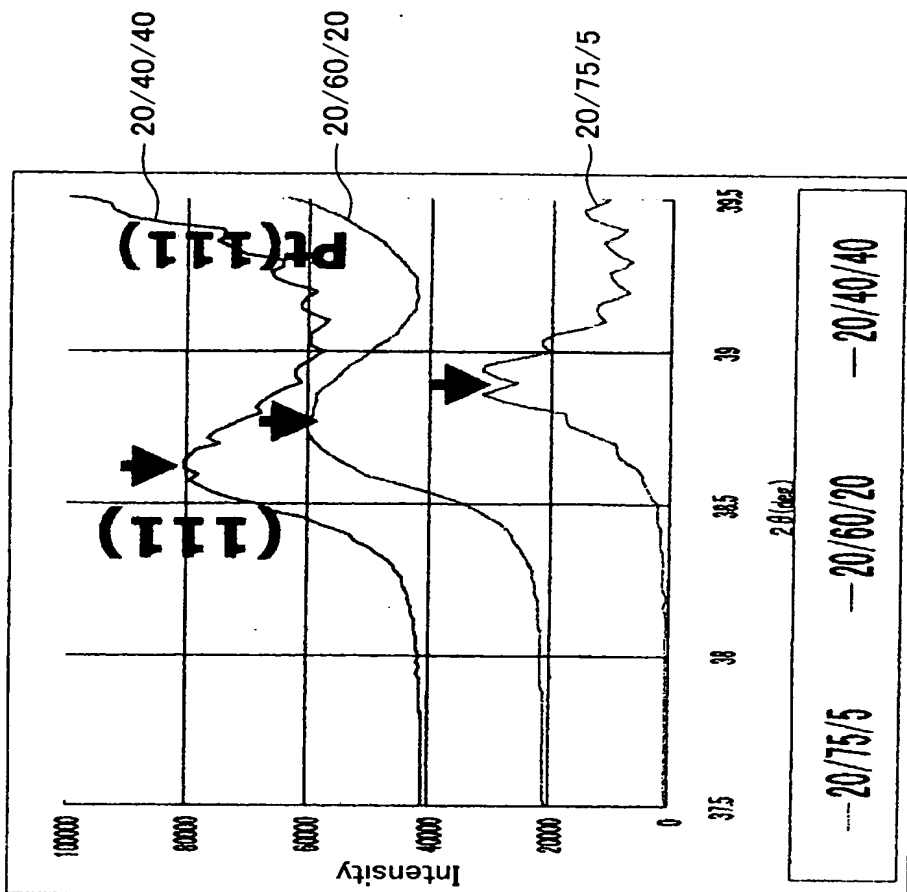
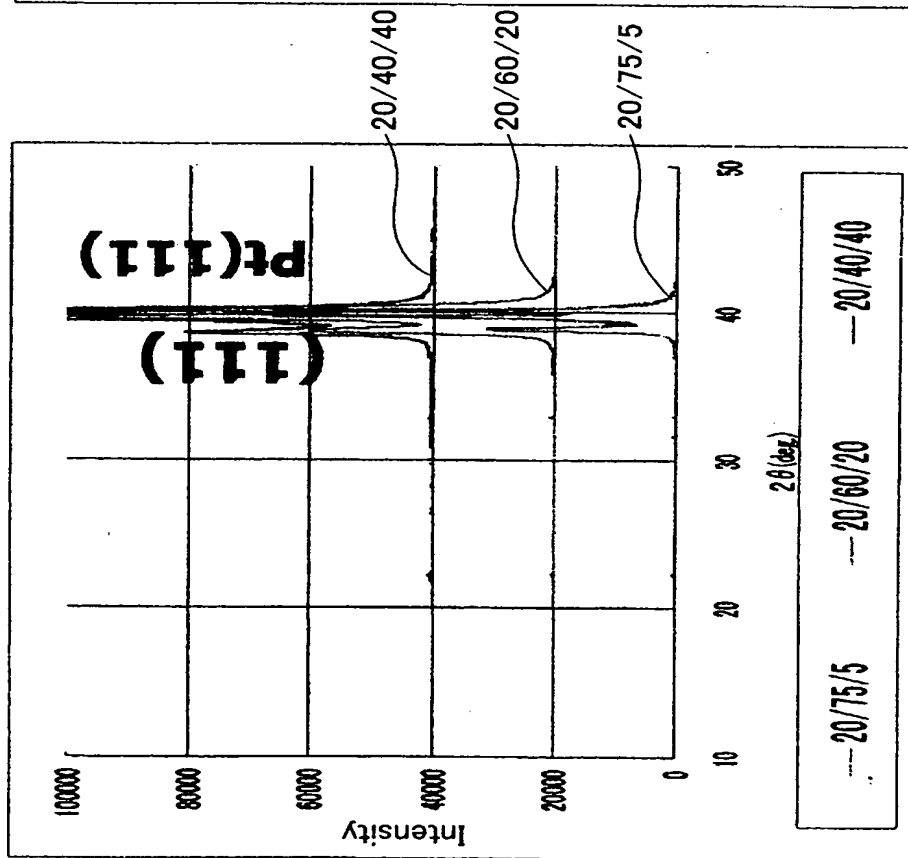


FIG. 8

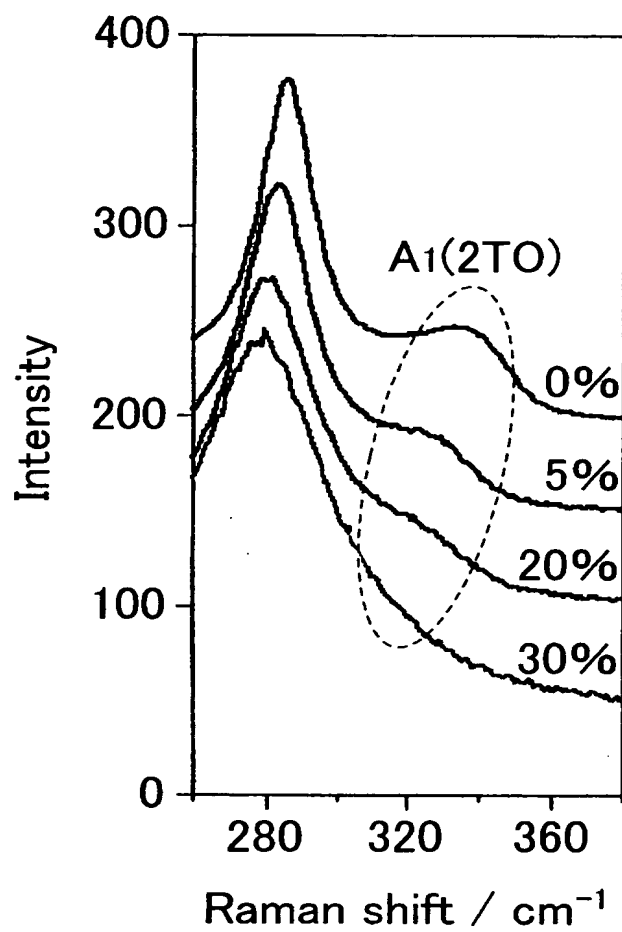


FIG. 9

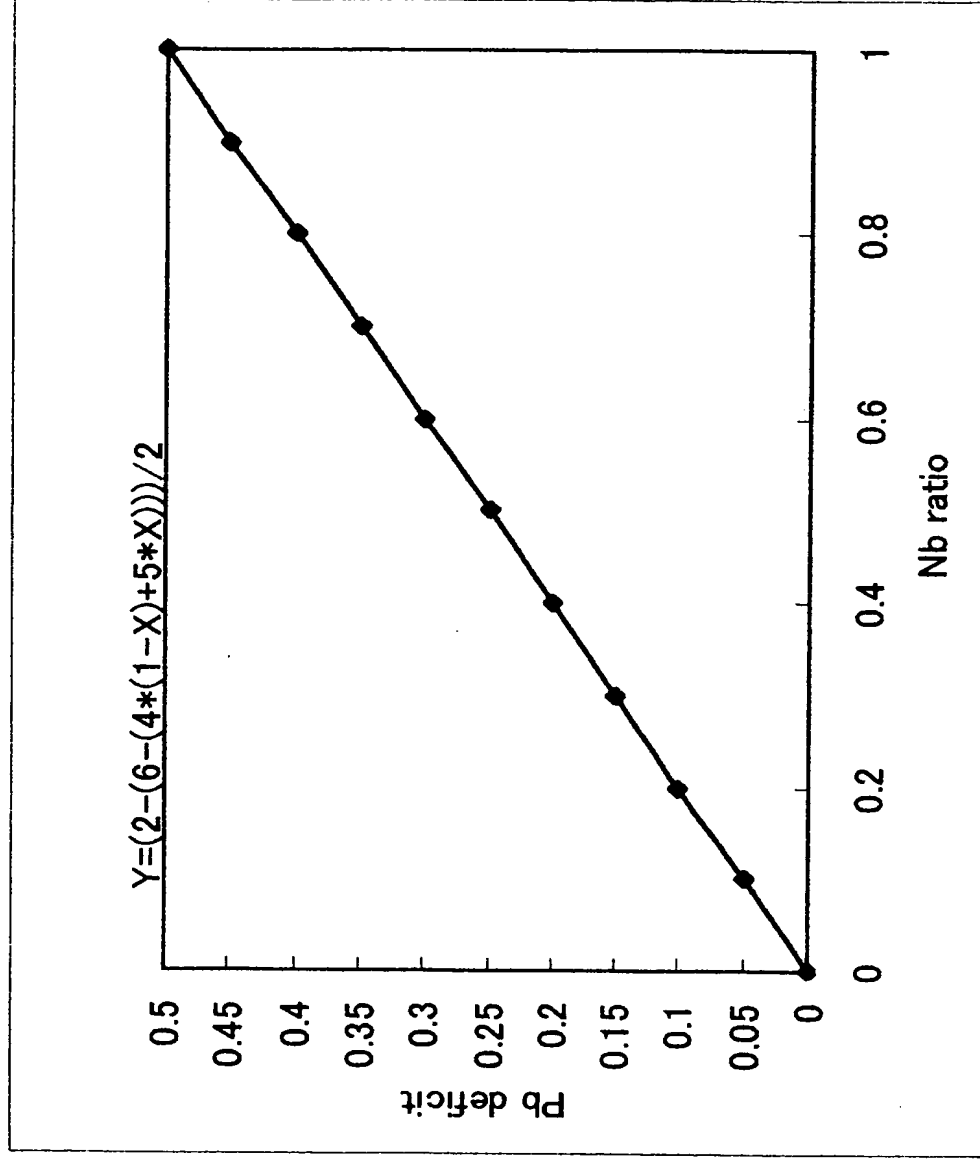


FIG. 10

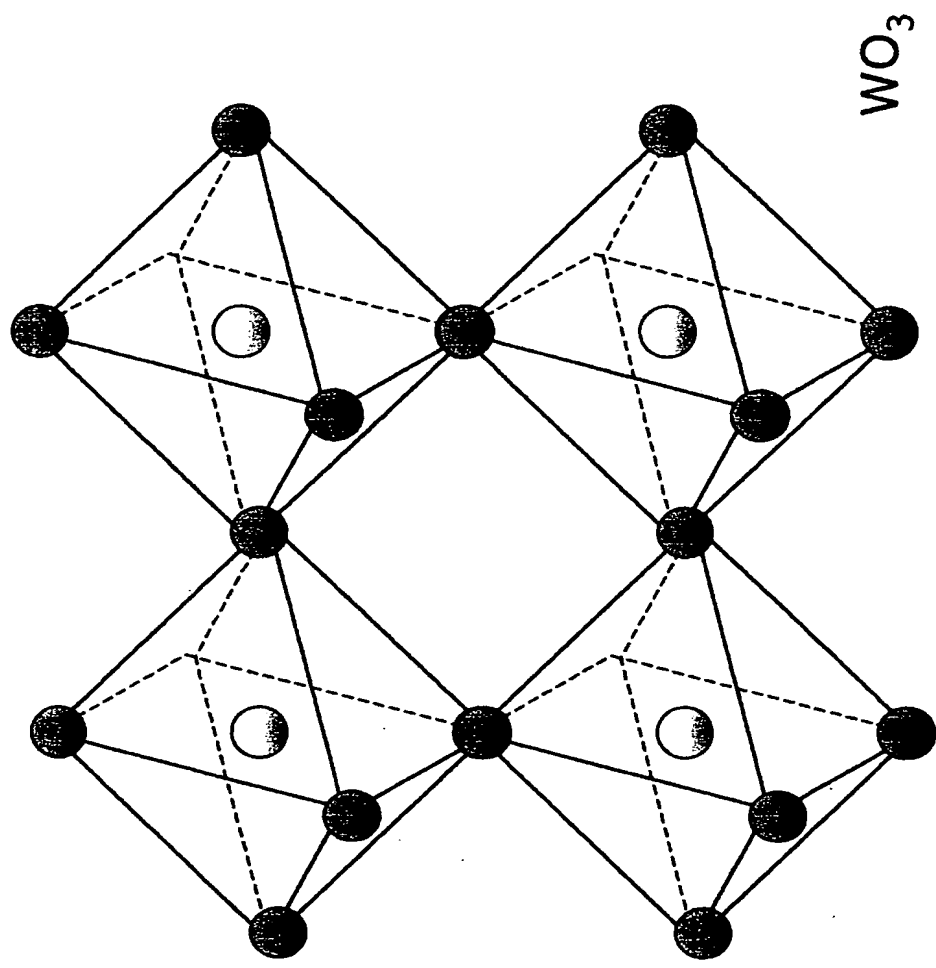


FIG. 11

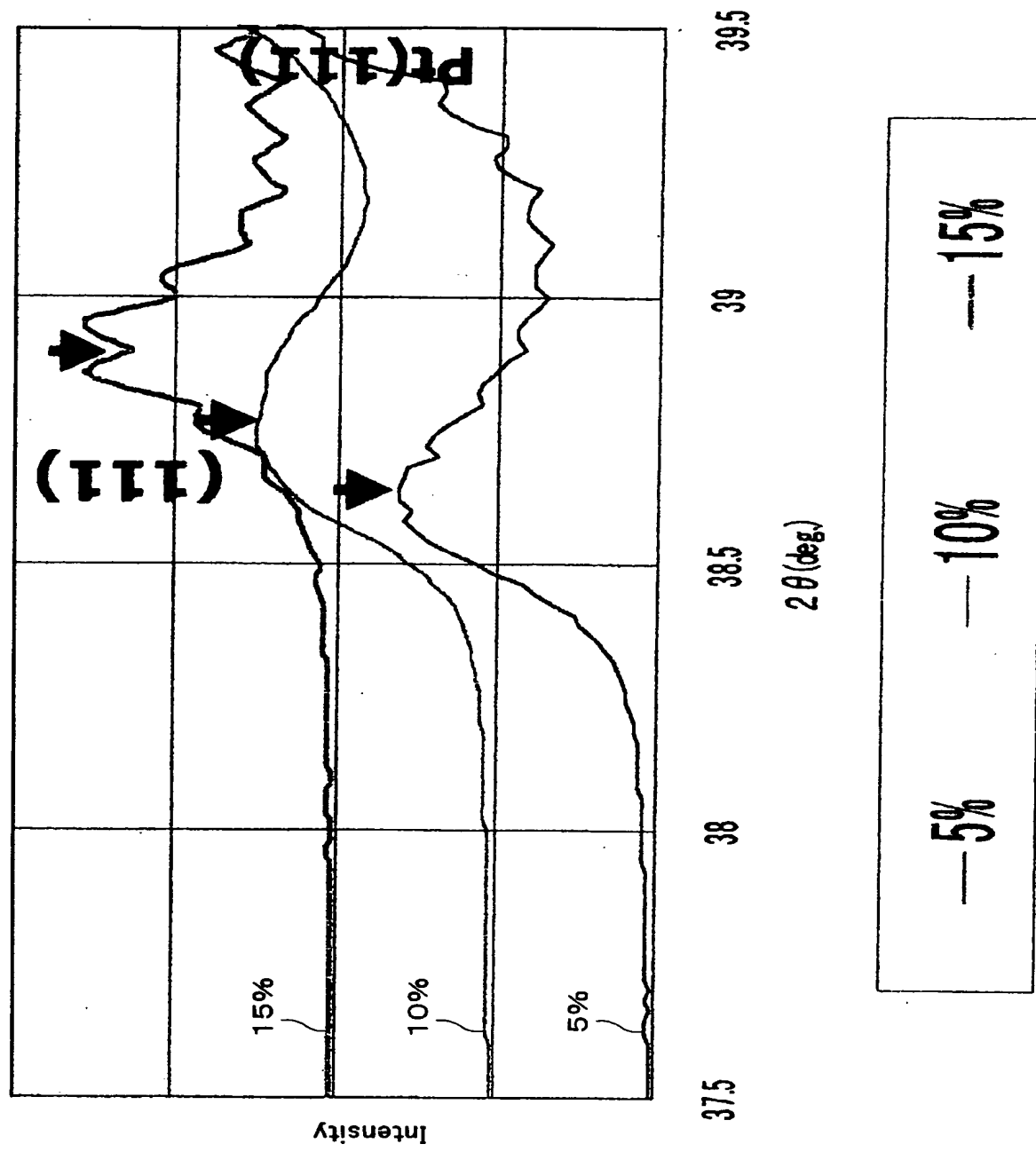


FIG. 12

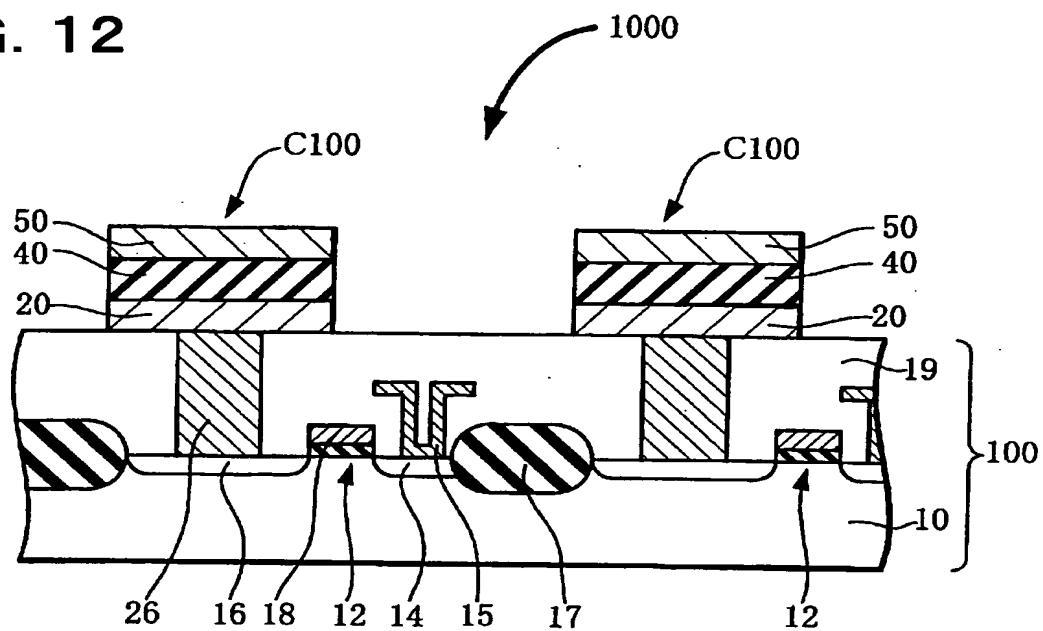


FIG. 13

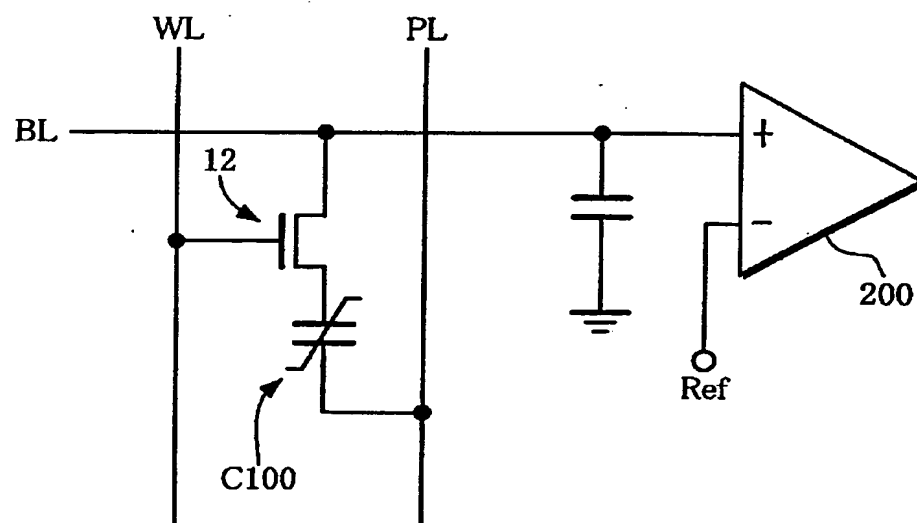


FIG. 14

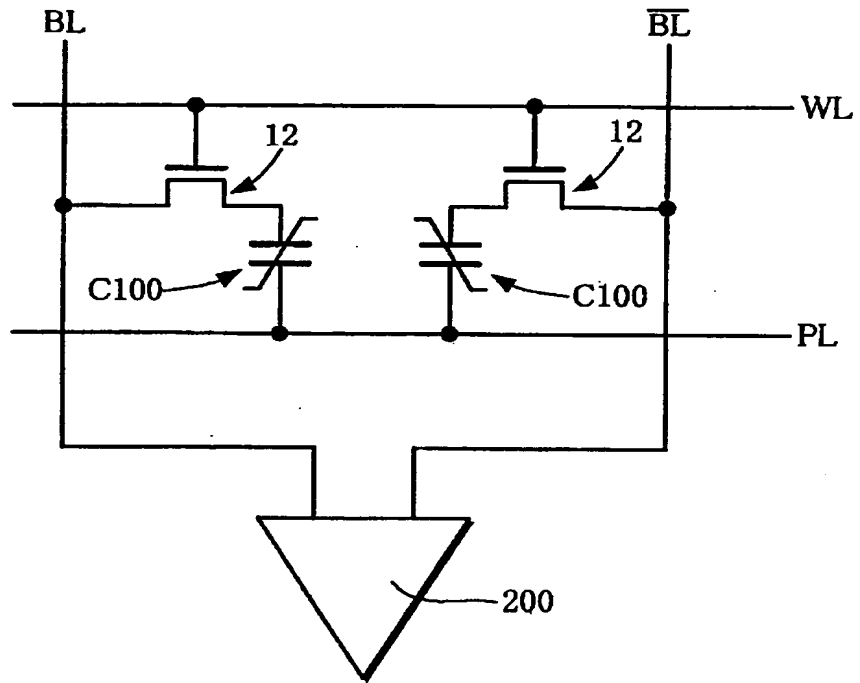


FIG. 15

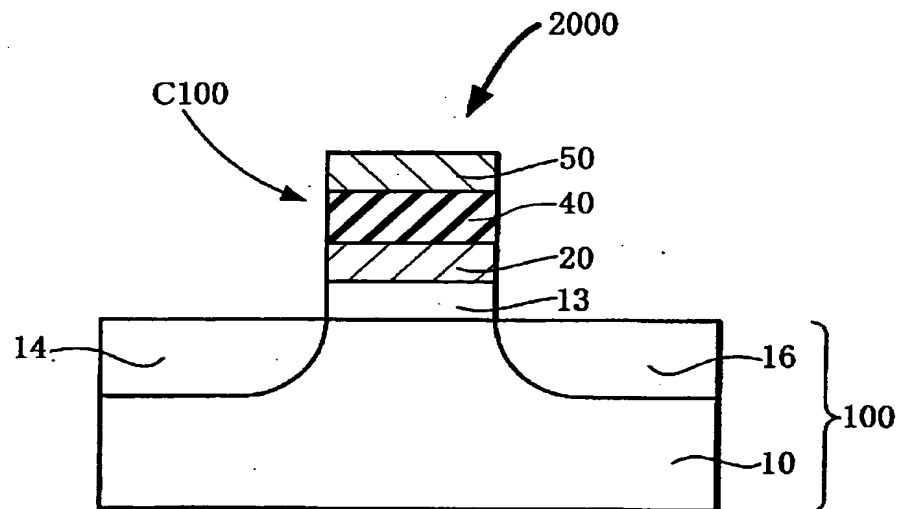


FIG. 16

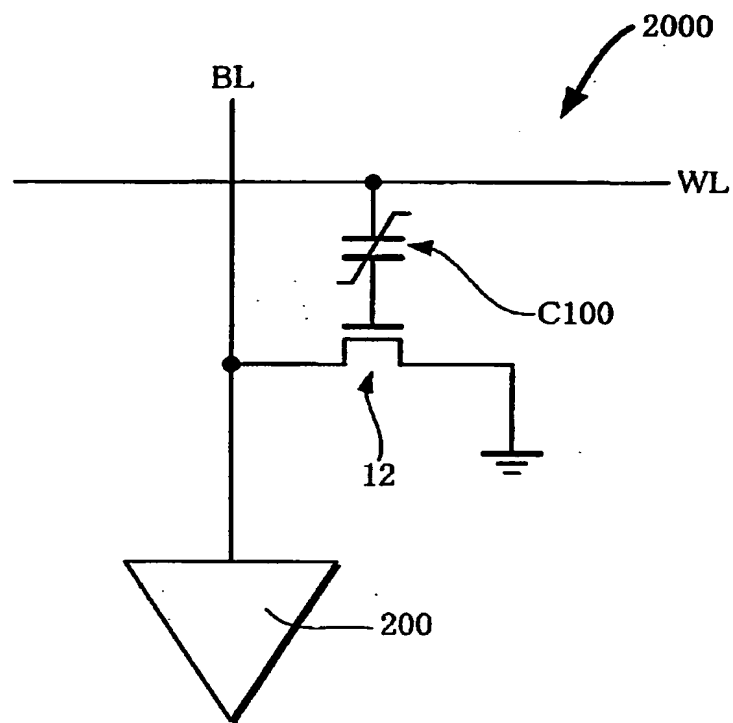


FIG. 17

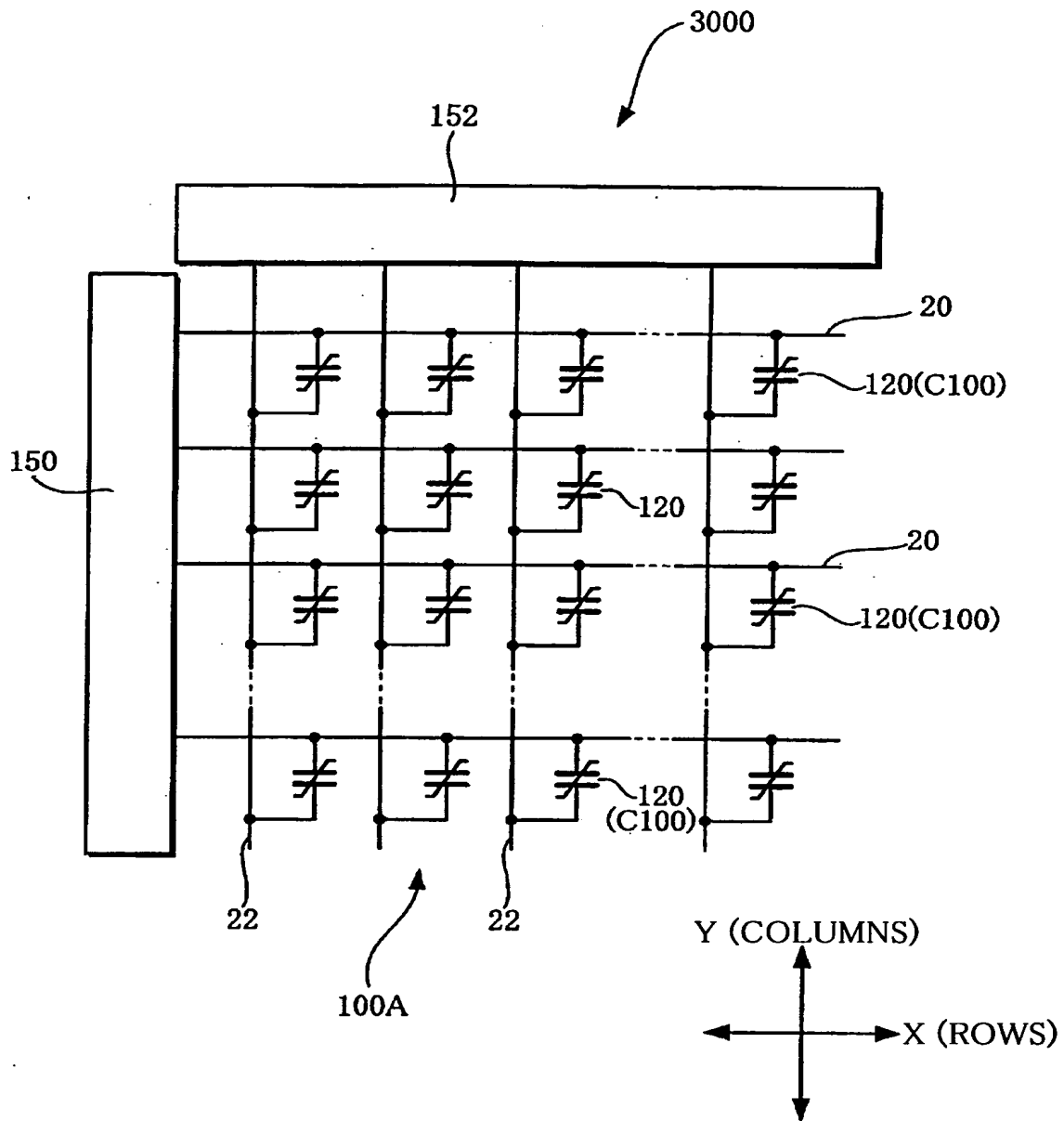


FIG. 18

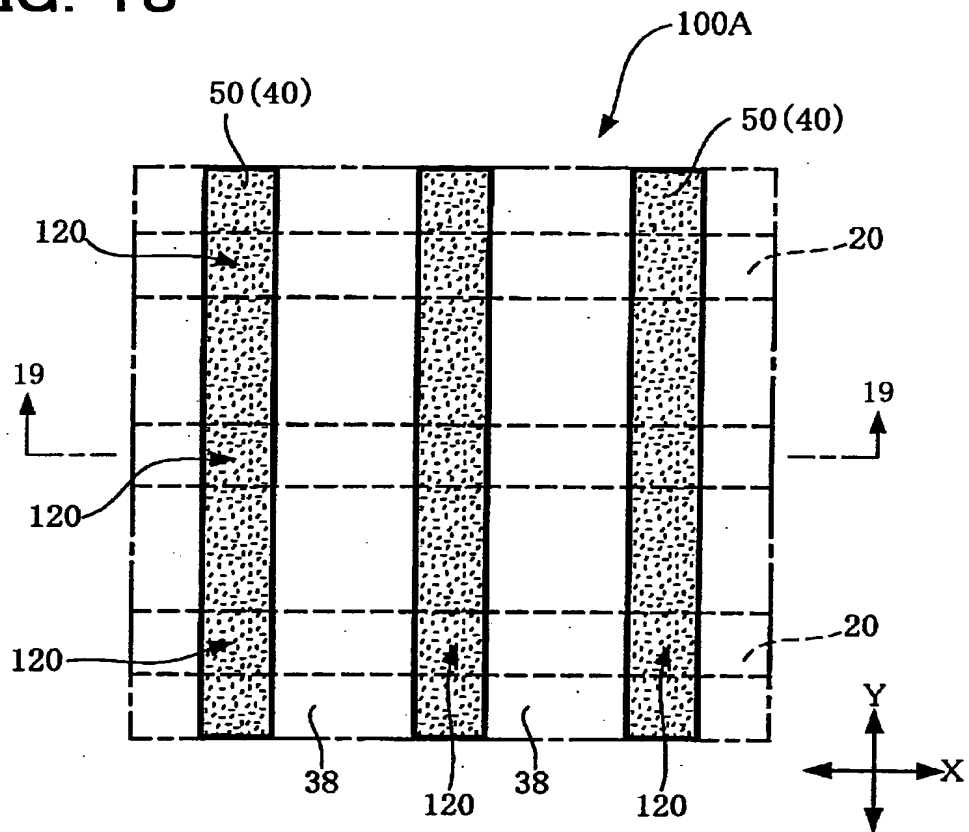


FIG. 19

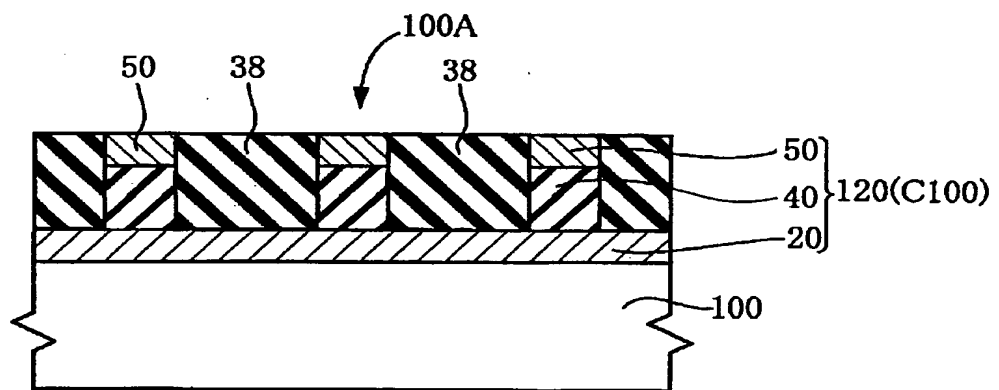


FIG. 20

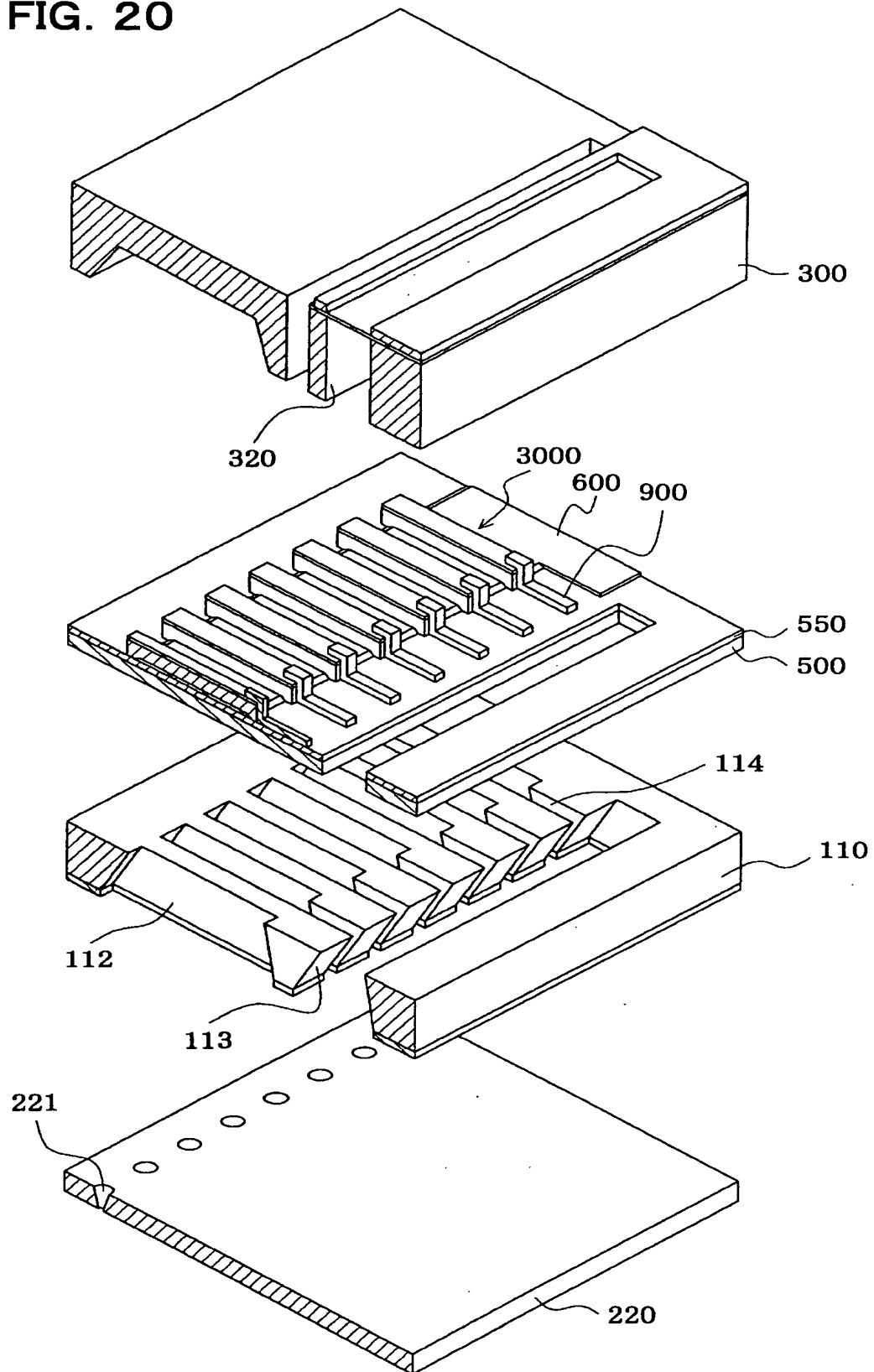


FIG. 21A

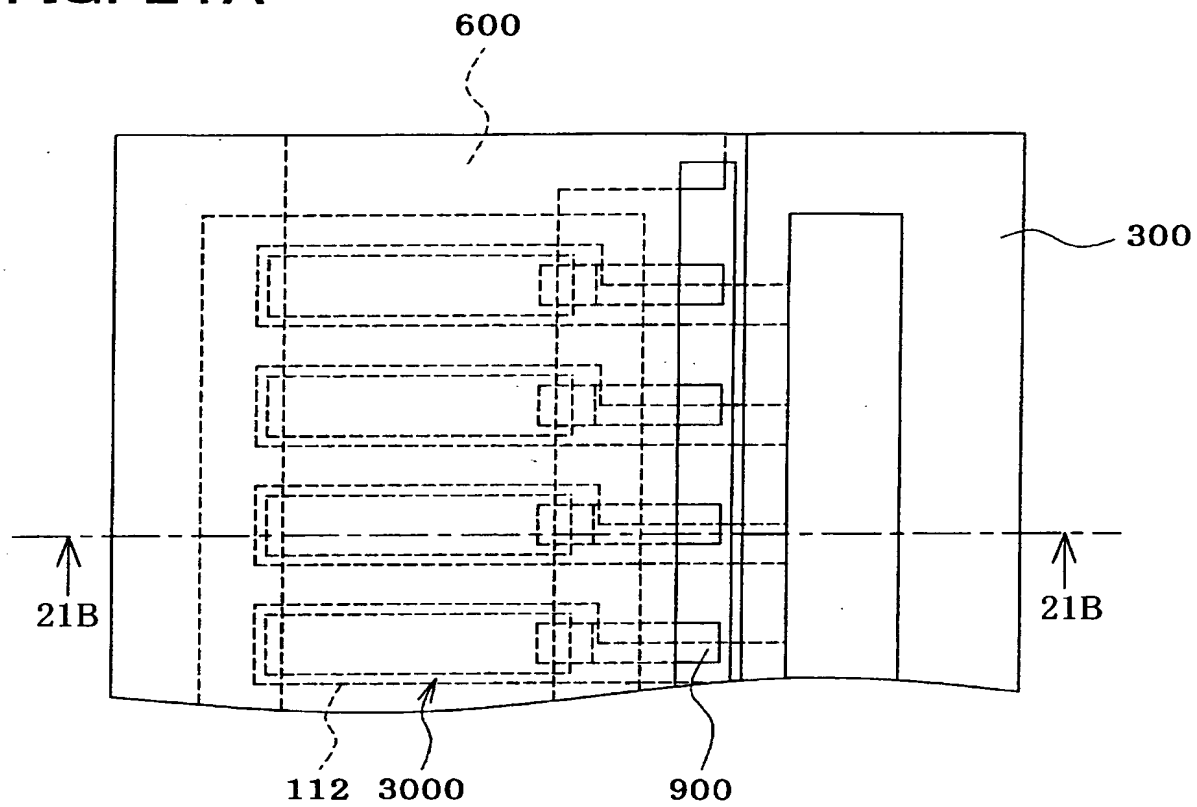


FIG. 21B

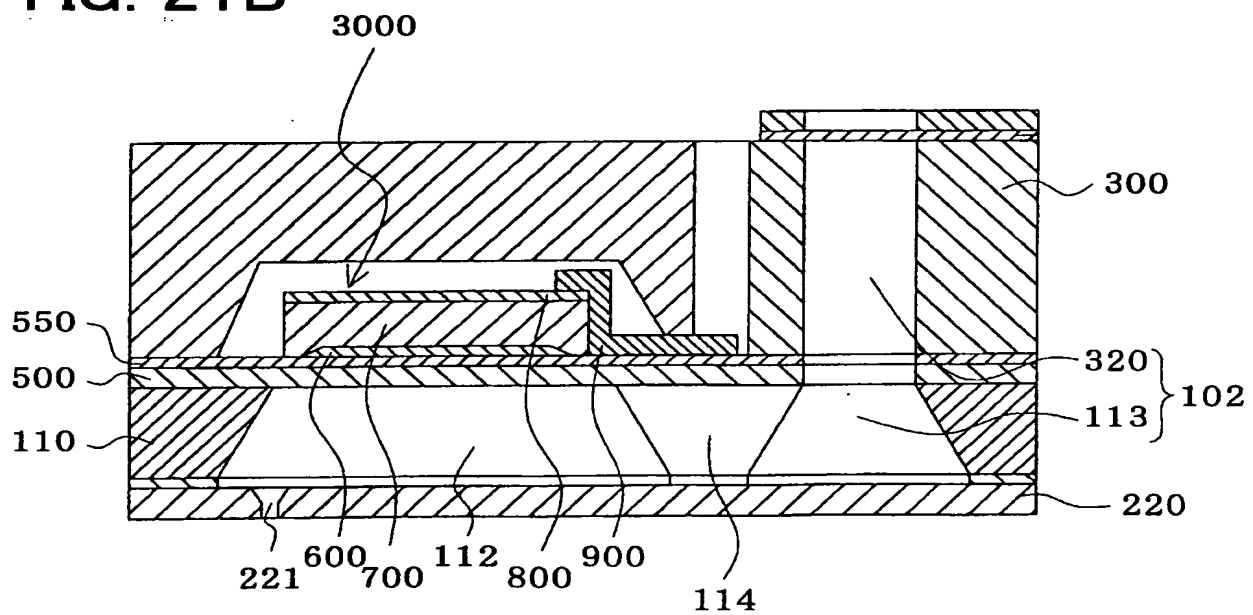


FIG. 22

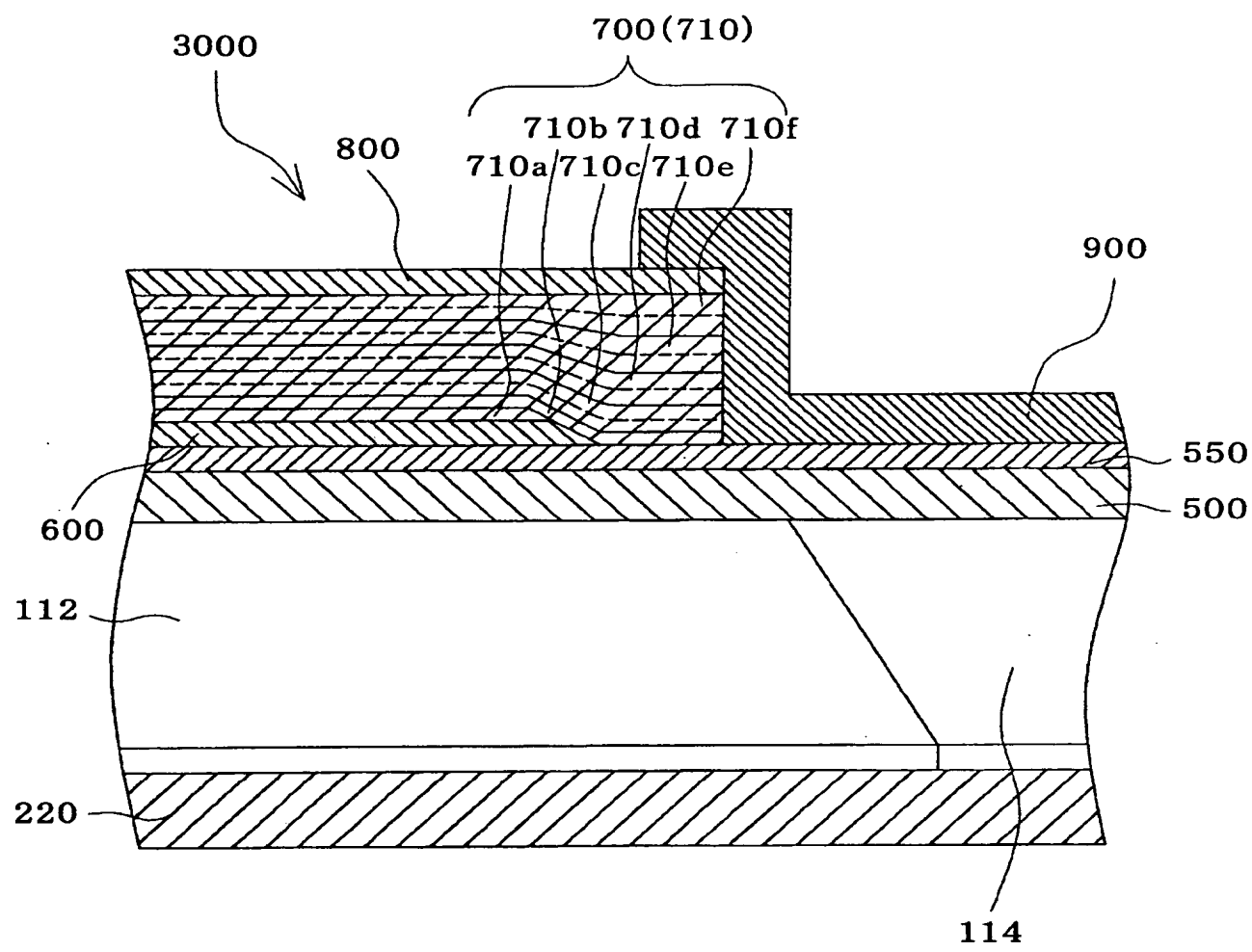


FIG. 23

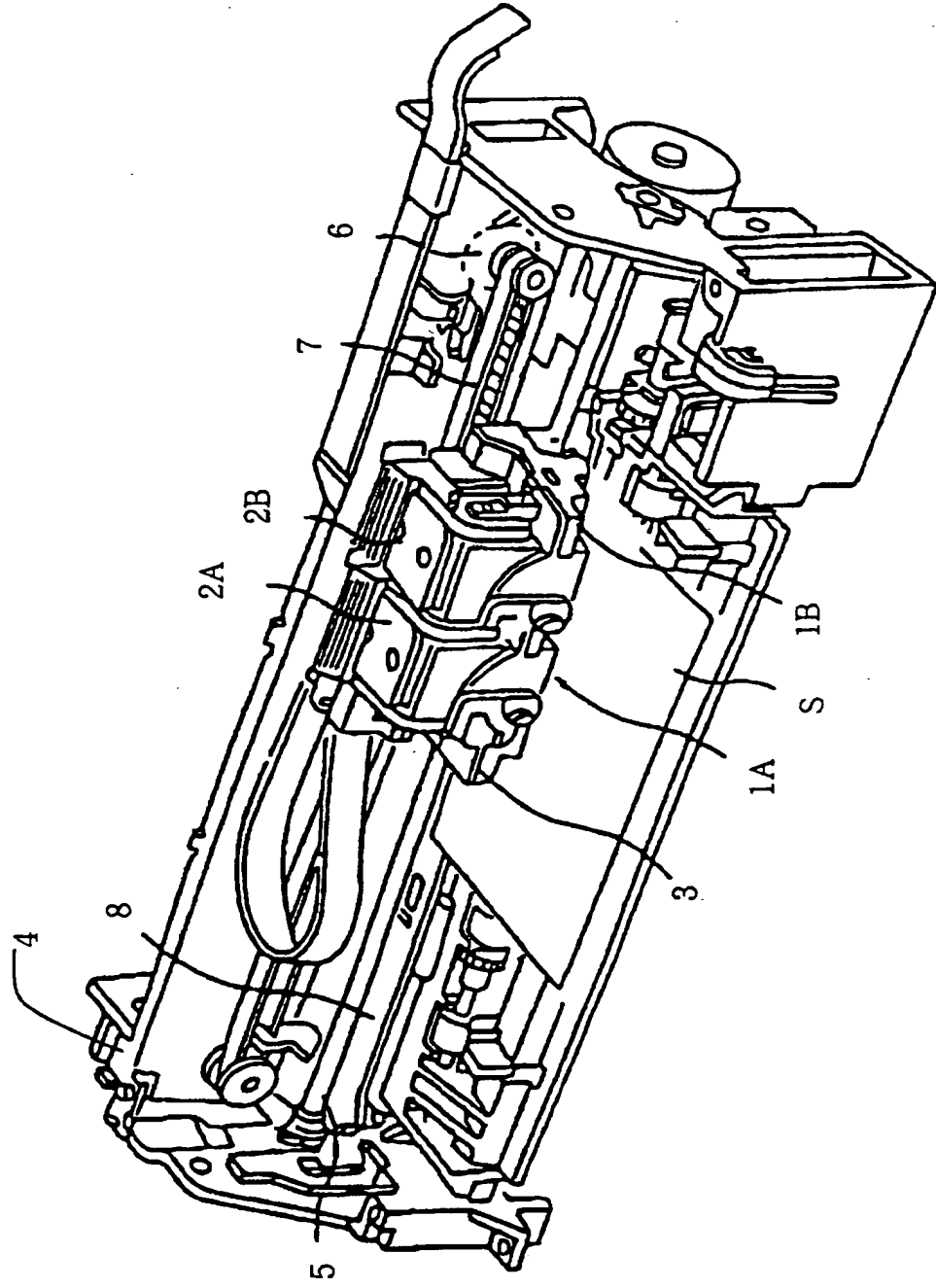


FIG. 24

